FCC PART 15 SUBPART C TEST REPORT

for

3.5G Plus WLAN Mobile Server Router

Model No.: CWR-635M

FCC ID: IIOCWR-635M

of

Applicant: CNet Technology Inc. Address: No. 15, Park Avenue II, Science-Based Industrial Park, Hsin-Chu City Taiwan R.O.C.

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

A2LA Accredited No.: 2732.01

Report No.: W6R20809-9335-C-1

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Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M

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<u>1</u> General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that is performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services (Taiwan) Co., Ltd.

Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according IEEE 802.11 b/g.

This report is related to FCC Part 15 C (DSSS and OFDM device).

Danny

Tester:

September 19, 20	008
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Date

WTS-Lab. Name

Signature

Technical responsibility for area of testing:

September 19, 2008		Chang Tse-Ming	Chang Tse-ring	
Date	WTS	Name	Signature	



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1.2 Testing laboratory

1.2.1 Location

OATS No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.)

Company Worldwide Testing Services (Taiwan) Co., Ltd. 6F, NO. 58, LANE 188, RUEY-KUANG RD. NEIHU, TAIPEI 114, TAIWAN R.O.C. Tel : 886-2-66068877 Fax : 886-2-66068879

1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA-registration number: 2732.01

FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

1.3 Details of approval holder

Name	· CNet Technology Inc
Street	: No. 15 Park Avenue II Science-Based Industrial Park
Torre	. No. 15, I alk Avenue II, Science-Dascu industrial I alk,
Town	: Hsin-Chu City
Country	: Taiwan R.O.C.
Telephone	: +886-3-5786666
Fax	: +886-3-5783525



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1.4 Application details

Date of receipt of test item	: September 18, 2008
Date of test	: from March 19, 2007 to April 10, 2007

1.5 General information of Test item

Type of test item	: 3.5G Plus WLAN Mobile Server Router
Model number	: CWR-635M
Brand name	: CNet
Photos	: see Appendix

Technical data

Frequency band	: 2.4 GHz – 2.4835 GHz
Frequency (ch 1 or A)	: 2.412 GHz
Frequency (ch 6 or B)	: 2.437 GHZ
Frequency (ch 11 or C)	: 2.462 GHz
Number of Channels	: 11
Operation modes	: duplex
Modulation Type	: DSSS / OFDM
Fixed point-to-point operation:	🗌 Yes / 🔀 No
Type of Antenna	: PCB antenna
Antenna gain	: 0 dBi
Power supply	: AC 120 V
Emission designator	: DSSS: 16M5G1D OFDM: 16M6W7D

Host device: none

Classification

Fixed Device	\square
Mobile Device (Human Body distance > 20 cm)	
Portable Device (Human Body distance < 20cm)	

:



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Mode A (DSSS)

Power (ch 1 or A)
Power (ch 6 or B)
Power (ch 11 or C)

- : Conducted: 15.07 dBm : Conducted: 15.08 dBm
- : Conducted: 14.71 dBm

Mode B (OFDM)

Power (ch 1 or A)	: Conducted: 11.57 dBm
Power (ch 6 or B)	: Conducted: 11.50 dBm
Power (ch 11 or C)	: Conducted: 11.13 dBm

Manufacturer:

(if applicable)

Name	: ./.
Street	: ./.
Town	: ./.
Country	: ./.

Additional information:	The sample is using WLAN technology according IEEE 802.11 b/g.
	There are two testing modes in the test report.
	Mode A: IEEE 802.11b
	Mode B: IEEE 802.11g
	The scheme for frequency generation, spectrum spreading,
	receiver parameters, synchronization procedure, and other parameters
	are determined by the mentioned standard above.

1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART B / SUBPART C § 15.247: August, 2006

Special Statement:

- 1. The standards applied to this test sample were under the demand of the applicant. Any deviation from the applicable product standards is the responsibility of the applicant.
- 2. This EUT is a multilisting based on the original model no. MR122g.
- 3. The relevant Circuitry, PCB Layout, Inner element, Function, and Appearance of this Certification is exactly the same as the original model no. MR122g. Therefore the test result is also base on the original test reports Nr. W6M20703-7925-C-1 without re-testing.



performed.

Worldwide Testing Services(Taiwan) Co., Ltd.

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2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.	×
or	
The deviations as specified in 2.5 were ascertained in the course of the tests	

2.2 Test environment

Temperature	:23 °C
Relative humidity content	: 20 75 %
Air pressure	:86 103 kPa
Power supply	: AC 120 V
Extreme conditions parameters	:



2.3 Test Equipment List

No.	Test equipment	Туре	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2006/10/16	2007/10/15
ETSTW-CE 002	PREREULATOR MODE DC POWER SUPPLY	None	None		Functi	on Test
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Functi	on Test
ETSTW-CE 004	ZWEILEITER-V- NETZNACHBILDUNG TWO- LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2006/10/16	2007/10/15
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2006/10/16	2007/10/15
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	In House	Certificate
ETSTW-CE 008	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2005/10/24	2007/10/23
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2006/8/17	2007/8/16
ETSTW-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2005/12/8	2007/12/7
ETSTW-CE 014	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T2-02	20241	FCC	2005/12/7	2007/12/6
ETSTW-CE 015	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T8-02	20307	FCC	2006/11/7	2008/11/6
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2006/11/21	2007/11/20
ETSTW-RE 002	Function Generator	33220A	MY43004982	Agilent	2005/10/14	2007/10/13
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2006/10/20	2007/10/19
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2006/10/30	2007/10/29
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2006/10/12	2007/10/11
ETSTW-RE 010	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070181	MOTECH	Function Test	
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	MOTECH	Functi	on Test
ETSTW-RE 017	Log-Periodic Antenna	HL025	352886/001	R&S	2006/5/4	2008/5/3
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2004/11/8	2007/11/7
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Functi	on Test
ETSTW-RE 021	SWEEP GENERATOR	SWM05	835130/010	R&S	2006/10/11	2007/10/10
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	EMCO	2004/6/30	2007/6/29
ETSTW-RE 028	Log-Periodic DipoleArray Antenna	3148	34429	EMCO	2006/5/26	2008/5/25
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	2006/5/26	2008/5/25
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2006/5/3	2008/5/2
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2006/10/11	2007/10/10
ETSTW-RE 033	WaveRunner 6000A Serise Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	2006/7/27	2007/7/26
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2005/10/17	2007/10/16
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2007/1/11	2009/1/10
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2006/5/8	2008/5/7
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2006/5/29	2008/5/28



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ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2005/3/22	2008/3/21
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2005/5/19	2007/5/18
ETSTW-RE 055	SPECTRUM ANALYZER	FSU-26	200074	R&S	2006/7/28	2007/7/27
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Functi	on Test



2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2003 using a 50μ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2003 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was 23°C with a humidity of 40 %.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of $dB\mu V$) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz)METER READING + ACF + CABLE LOSS (to the receiver) = FS33 $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} @3m$

The UUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2000 Section 13.1.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

(1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

(2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

(3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.

(4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by Worldwide Testing Services (Taiwan) Co., Ltd. at the registered open field test site located at No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.) The Registration Number: 930600.



When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows: Average = Peak + Duty Factor Duty Factor = 20 log (dwell time/T) T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANTENNA & GROUND: This unit uses PCB Antenna. (see photos)



3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)(3)	×	×	
Equivalent radiated Power	15.247(b)(3)	×	×	
Spurious Emissions radiated – Transmitter operating	15.247(c)	×	×	
Band Edge Measurement	15.247(c)	×	×	
Minimum 6 dB Bandwidth	15.247(a)(2)	×	×	
Peak Power Spectral Density	15.247(d)	×	×	
Radiated Emission from Digital Part And Receiver L.O.	15.109			
Power Line Conducted Emission	15.207	×	×	

The follows is intended to leave blank.



3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant. The power was measured with modulation (declared by the applicant).

Mode A

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
т 2200 и 120 и	[dBm]	[dBm]	[dBm]	
I _{nom} -23 C	$V_{nom} = 120 V$	15.07	15.08	14.71

Mode B

Test condition		Conducted Power		
	Test condition		Channel B	Channel C
$T = 22^{\circ}C$	$T_{nom} = 23^{\circ}C$ $V_{nom} = 120$ V	[dBm]	[dBm]	[dBm]
I nom- 23 C		11.57	11.50	11.13

Mode A

Test condition $T_{nom}=23^{\circ}C, V_{nom}=120 V$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	
2412	104.12

Mode B

Test condition $T_{nom}=23^{\circ}C, V_{nom}=120 V$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	
2412	99.71



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Limits:

Frequency	Power
MHz	dBm
902 - 928	30
2400 - 2483.5	30
5725 - 5850	30

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to point operation consider §15.247 (b)(4)

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Explanation : The diagrams for the field strength measurements are included in Appendix.



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3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain EIRP = 15.08 dBm + 0 dBi = 15.08 dBm Limit: EIRP = +36 dBm for Antenna gain <6dBi Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 021 ETSTW-RE 028 ETSTW-RE 030 ETSTW-RE 043 ETSTW-RE 044

3.2.1 Transmitter

Integral Antenna:

At the transmitter the measurement was transacted with the modulation declared by the manufacturer and the maximum available output power of the EUT. In this arrangement the EUT fulfils the requirements of the FCC rules § 15.247, subpart C, section b.

3.3 RF Exposure Compliance Requirements

The test sample is a GSM/VOWIFI Dual-Mode Phone intended for portable installation.

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a "worst case" or conservative prediction.

$$S = \frac{PG}{4 \pi R^2}$$

S – Power Density

P – Output power ERP

- R-Distance
- $D-Cable \ Loss$

AG - Antenna Gain G = AG-D

Item	Unit	Value	Remarks
Р	mW	32.21	Peak value
D	dB		
AG	dBi	0	
G		1	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.006408	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure							
Frequency (MHz)	Power Density (mW/cm ²)						
1500 - 100.000	1,0						



3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz. For radiated emission tests, the analyzer setting was as followings:

 $\begin{array}{l} \mbox{Frequency} \leq 1 \mbox{ GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)} \\ \mbox{Frequency} > 1 \mbox{ GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)} \\ \mbox{Frequency} > 1 \mbox{ GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)} \end{array}$

Limits.

Frequency of Emission	Field strength	Field Strength
(MHz)	(microvolts/meter)	(dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies below 1GHz:

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of DSSS Systems:

"If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation."

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = 20 log (dwell time/ 100ms)

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: see attached diagrams in Appendix.



3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement. Limits:

Max. reading – 20 dB Mode A: 104.12dB μ V/m- 20 dB= 84.12 dB μ V/m Mode B: 99.71dB μ V/m- 20 dB= 79.71 dB μ V/m

Guidance on Measurement of DSSS Systems:

"If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation."

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = 20 log (dwell time/100ms) For frequencies above 1GHz (Peak measurements). Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements). Max. reading -20dB

Note: No duty cycle correction was added to the reading of EUT.

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028 ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043 ETSTW-RE 044

Explanation: see attached diagrams in Appendix.



SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Duty-Cycle Correction Factor".

Summary table with radiated data of the test plots

Mode A CH 1

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	168.316	25.35	15.05	PK	40.40	43.5	3.10	358	44
	201.603	37.07	12.17	PK	49.24	84.12	34.88	327	262
н	268.937	29.53	14.42	PK	43.95	46	2.05	249	46
11	2390.000	58.43	2.07	PK	60.50	74	13.50	140	230
-	2390.000	46.13	2.07	AV	48.20	54	5.80	140	230
	4825.231	47.27	4.56	PK	51.83	54	2.17	154	138

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	132.204	15.84	14.25	PK	30.09	43.5	13.41	109	45
	268.937	24.80	14.42	PK	39.22	46	6.78	245	51
V	1038.425	55.28	-9.56	PK	45.72	54	8.28	143	275
-	2390.000	48.62	2.07	PK	50.69	54	3.31	155	175
	2664.337	51.24	-0.66	PK	50.58	54	3.42	168	131



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Ch6									
Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	168.316	26.73	15.05	PK	41.78	43.5	1.72	369	42
-	201.603	33.20	12.17	PK	45.37	84.12	38.75	326	265
	268.937	28.26	14.42	PK	42.68	46	3.32	258	57
Н	2372.745	49.97	2.08	PK	52.05	54	1.95	174	345
-	2500.061	54.14	-1.74	PK	52.40	54	1.60	150	165
	4873.747	47.30	4.81	PK	52.11	54	1.89	183	112
	7494.9880	45.20	6.78	РК	51.98	54	2.02	149	184

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	132.204	21.63	14.25	PK	35.88	43.5	7.62	116	47
V	268.937	25.15	14.42	РК	39.57	46	6.43	248	50
v	1673.346	54.76	-6.69	PK	48.07	54	5.93	127	263
	2663.602	51.20	-0.66	PK	50.54	54	3.46	168	152

Ch11

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	168.316	26.42	15.05	PK	41.47	43.5	2.03	368	45
	201.603	34.04	12.17	PK	46.21	84.12	37.91	327	263
	268.937	29.41	14.42	PK	43.83	54	10.17	247	53
Н	2322.244	50.21	2.11	PK	52.32	54	1.68	133	330
-	2483.500	58.43	-1.09	AV	57.34	74	16.66	133	270
	2483.500	46.00	-1.09	PK	44.91	54	9.09	180	270
	4921.843	47.76	4.75	PK	52.51	54	1.49	126	115

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	132.204	22.06	14.25	PK	36.31	43.5	7.19	117	40
V	268.937	23.94	14.42	PK	38.36	54	15.64	249	55
v	1110.222	56.68	-8.59	PK	48.09	54	5.91	169	258
	2644.637	51.39	-0.66	PK	50.73	54	3.27	154	174



Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M

Mode B CH 1

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	165.251	24.96	15.20	PK	40.16	43.5	3.34	366	42
	201.603	34.85	12.17	PK	47.02	79.71	32.69	322	269
	268.937	28.94	14.42	AV	43.36	46	2.64	251	49
н	1168.336	54.19	-8.07	PK	46.12	54	7.88	157	69
11	2359.374	51.82	2.08	PK	53.90	74	20.10	173	350
-	2359.374	39.42	2.08	AV	41.50	54	12.50	173	350
	2390.000	64.75	2.07	PK	66.82	74	7.18	105	320
	2390.000	49.93	2.07	AV	52.00	54	2.00	105	320

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	132.204	16.46	14.25	PK	30.71	43.5	12.79	113	38
	268.937	24.63	14.42	PK	39.05	46	6.95	246	53
V	1490.981	41.79	-7.35	PK	43.86	54	10.14	137	340
	2390.000	54.56	2.07	PK	56.63	74	17.37	179	188
	2390.000	49.85	2.07	AV	42.50	54	11.50	179	188

Ch6

Antenna Polarization	Frequency Marker (MHz)	Reading (dBuV)	Correction Factor (dB)	Detector	Test Result (dBuV/m)	Compliance Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Azimuth (degree)
	165.254	26.46	15.20	PK	41.66	43.5	1.84	365	47
H	201.603	36.01	12.17	PK	48.18	79.71	31.53	323	257
	268.937	29.76	14.42	PK	44.18	46	1.82	253	53
	2321.540	52.07	2.11	PK	54.18	74	19.82	123	340
	2321.540	37.09	2.11	AV	39.20	54	14.80	123	340

Antenna Polarization	Frequency Marker	Reading	Correction Factor	Detector	Test Result	Compliance Limit	Margin	Antenna Height	Table Azimuth
Polarization	(MHz)	(dBuV)	(dB)		(dBuV/m)	(dBuV/m)	(dB)	(cm)	(degree)
	132.204	24.29	14.25	РК	38.54	43.50	4.96	115	45
V	268.937	24.78	14.42	РК	39.20	46.00	6.80	244	56
v	1168.336	52.49	-8.07	РК	44.42	54.00	9.58	151	272
	2321.442	46.99	2.11	PK	49.10	54.00	4.90	188	190



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Antenna	Frequency	Reading	Correction		Test	Compliance	Margin	Antenna	Table
Polarization	Marker	$(dB_{11}V)$	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
Polarization	(MHz)	(ubuv)	(dB)	(dBuV/m)	(dBuV/m)	(uD)	(cm)	(degree)	
	132.204	26.49	14.25	PK	40.74	43.5	2.76	368	43
Н	201.603	36.62	12.17	PK	48.79	79.71	30.92	325	258
	268.937	28.95	14.42	PK	43.37	46	2.63	255	52
	2325.393	49.11	2.11	PK	51.22	74	22.78	136	355
	2325.393	36.49	2.11	AV	38.60	54	15.40	136	355
	2483.500	65.31	-1.09	PK	64.22	74	9.78	148	50
	2483.500	50.69	-1.09	AV	49.60	54	4.40	148	50

Antonno	Frequency	Dooding	Correction		Test	Compliance	Morgin	Antenna	Table
Polarization	Marker	$(dB_{11}V)$	Factor	Detector	Result	Limit	(dB)	Height	Azimuth
Polarization	(MHz)	(авих)	(dB)	(dBuV/m)	(dBuV/m)	(uD)	(cm)	(degree)	
	132.204	16.25	14.25	PK	30.50	43.50	13.00	119	49
V	268.937	25.16	14.42	РК	39.58	46.00	6.42	247	57
v	2483.500	53.49	-1.09	PK	52.40	74.00	21.60	141	280
	2483.500	39.69	-1.09	AV	38.60	54.00	15.40	141	280

Note 1. Correction Factor = Antenna factor + Cable loss - Preamplifier

2. The formula of measured value as: Test Result = Reading + Correction Factor

3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average

4. All not in the table noted test results are more than 20 dB below the relevant limits.

Freq. – Frequency Range:

	1	1	2	0
1:		30	-	200 MHz
2:		200	-	1000 MHz
3:		1	-	4 GHz
4:		4	-	8 GHz
5:		8	-	12 GHz
6:		12	-	17 GHz
7:		17	-	26.5 GHz

TEST RESULT (Transmitter): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028 ETSTW-RE029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043 ETSTW-RE 044

Explanation: see attached diagrams in Appendix.



3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

Mode A

Test conditions		Attenuation at or outside band-edges				
		Lower Band-edge	Upper Band-edge			
$T_{nom} = 23^{\circ}C$	$V_{nom} = 120$ V	41.55 dB	50.68 dB			

Mode B

Test co	nditions	Attenuation at or outside band-edges			
i est conditions		Lower Band-edge	Upper Band-edge		
$T_{nom} = 23^{\circ}C$	$V_{nom} = 120$ V	39.14 dB	46.75 dB		

Limit:

Frequency Range / MHz	Limit
902 –928	
2400 - 2483.5	- 20 dB
5725 - 5850	

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028 ETSTW-RE 030 ETSTW-RE 043 ETSTW-RE 044

Explanation: Please see attached diagram as appendix.



3.7 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission. The 6 dB bandwidth is the frequency difference between the two markers.

Mode A

Test conditions		6 dB Bandwidth			
		Channel 1	Channel 6	Channel 11	
$T_{nom} = 23^{\circ}C$	$V_{nom} = 120 V$	11.794871795 MHz	12.403846154 MHz	12.403846154 MHz	

Mode B

Test conditions		6 dB Bandwidth			
		Channel 1	Channel 6	Channel 11	
$T_{nom} = 23^{\circ}C$	$V_{nom} = 120 V$	16.602564103 MHz	16.602564103 MHz	16.602564103 MHz	

Limits:

Frequency Range MHz	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Explanation: Please see attached diagram as appendix.



3.8 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

Mode A	
--------	--

		Peak Power Spectral Density (3 kHz)			
Test conditions		Channel 1	Channel 6	Channel 11	
		[dBm]	[dBm]	[dBm]	
$T_{nom} = 23^{\circ}C$	V _{nom} = 120 V	-11.46	-11.57	-12.25	

Mode B

		Peak Power Spectral Density (3 kHz)				
Test conditions		Channel 1 [dBm]	Channel 6 [dBm]	Channel 11 [dBm]		
$T_{nom} = 23^{\circ}C$	V _{nom} = 120 V	-17.18	-18.47	-19.27		

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483,5	8
5725-5850	8

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 055

Explanation: see attached diagrams in Appendix.



3.9 Radiated Emission from Digital Part And Receiver L.O.

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission	Field Strength	Field Strength		
(MHz)	(microvolts/meter)	(dBmicrovolts/meter)		
30 - 88	100	40.0		
88-216	150	43.5		
216 - 960	200	46.0		
Above 960	500	54.0		

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028 ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043 ETSTW-RE 044

Explanation: The test results are listed in the separated test report no. W6R20809-9335-P-15B.



3.10 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

Enoqueney	Level (dBµV)					
Frequency	quasi-peak	average				
150 kHz	lower limit line	Lower limit line				

LISN type	Frequency Marker	Rea (dB	ding uV)	Correction Factor	Test I (dB	Result uV)	Comp Liı (dB	liance nit uV)	Maı (d	rgin B)
	MHz	QP	AV	dB	QP	AV	QP	AV	QP	AV
NT	0.380	30.80	21.55	10.10	40.90	31.65	58.27	48.27	17.37	16.62
N	0.770	35.95	2.68	10.10	46.05	12.78	56.00	46.00	9.95	33.22
	25.005	23.47	19.53	10.10	33.57	29.63	60.00	50.00	26.43	20.37

LISN type	Frequency Marker	Rea (dB	ding uV)	Correction Factor	Test I (dB	Result uV)	Comp Liı (dB	liance nit uV)	Maı (d	rgin B)
	MHz	QP	AV	dB	QP	AV	QP	AV	QP	AV
T 1	0.380	33.81	25.76	10.10	43.91	35.86	58.27	48.27	14.36	12.41
	0.770	35.49	5.78	10.10	45.59	15.88	56.00	46.00	10.41	30.12
	25.005	21.72	16.91	10.10	31.82	27.01	60.00	50.00	28.18	22.99

Note: 1. The formula of measured value as: Test Result = Reading + Correction Factor

- 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
- 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.



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Limits:

Frequency of Emission (MHz)	Conducted Limit (dBuV)			
	Quasi Peak	Average		
0.15-0.5	66 to 56	56 to 46		
0.5-5	56	46		
5-30	60	50		

Test equipment used: ETSTW-CE 001 ETSTW-CE 003 ETSTW-CE 004 ETSTW-CE 006 ETSTW-CE 011

Explanation: see attached diagrams in Appendix.



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<u>Appendix</u>

Measurement diagrams

- 1. Peak Output Power
- 2. Spurious Emissions radiated
- 3. Band Edge Measurement
- 4. Minimum 6dB Bandwidth
- 5. Peak Power Spectral Density
- 6. Power Line Conducted Emission



Peak Output Power Mode A



MAX OUTPUT POWER 802.11B CH1 Date: 28.MAR.2007 13:20:25



MAX OUTPUT POWER 802.11B CH6 Date: 28.MAR.2007 13:21:13



Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M



MAX OUTPUT POWER 802.11B CH11 Date: 28.MAR.2007 13:21:39



MAX OUTPUT POWER 802.11G CH1 Date: 28.MAR.2007 13:16:34

Mode B



Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M



MAX OUTPUT POWER 802.11G CE6 Date: 28.MAR.2007 13:23:14



MAX OUTPUT POWER 802,11G CH11 Date: 28.MAR.2007 13:22:37



Mode A

Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C / LP 0002







Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M

> Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002







> Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002





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Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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Mode B

Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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> Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002






Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M

> Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002



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Carrier power (Field Strength) FCC RULES PART 15, SUBPART C / LP 0002







Spurious Emissions radiated Mode A

> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Dana 1/1 2007/3/26 10:1488 Comprehense & Internet April Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C / LP 0002



Pana 1/1 2007/3/26 11+06BM Computer / Antenna Vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Pana 1/1 2007/3/26 11+018M Communical Annuous vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 10:58AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C / LP 0002



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- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



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Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:25PM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 09:31AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002





Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 09:09AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:12FM Overview / Antenna horizontel

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:24PM Overview / Anterna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:09FM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:26PM Overview / Anterna vertical

- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:16FM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:19PM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:17PM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/26 03:10PM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:26PM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:25PM Overview / Antenna vertical

- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Mode B

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 09:44AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 11:56AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 09:00AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:543M Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:40AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:20AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:348M Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:24AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:31AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/37 07:27AM Overview / Anterna vertical

- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- For corrected test results are listed in the relevant table of radiated test data of this test report. 3.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:30AM Overview / Antenna horizontel

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:28AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Spurious emissions Field Strength





Page 1/1 3/26/2007 4:21PM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:21PM Overview / Antenna vertical

- The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final 1. checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Spurious emissions Field Strength





Page 1/1 2007/3/27 11:53AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 11:55AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:51AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:53AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 07:59AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:17AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 OB:05AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:12XM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 OB:07AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:10AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/37 08:08AM Overview / Anterna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:09XM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:21PM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:20PM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Spurious emissions Field Strength





Page 1/1 2007/3/27 11:52AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002





- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:49AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:47AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:34AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:23AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 OB:31AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:26AM Overview / Anterna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:30AM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:28AM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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> Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 OB:30AM Overview / Antenna horizontel

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 2007/3/27 08:293M Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Spurious emissions Field Strength





Page 1/1 3/26/2007 4:20PM Overview / Antenna horizontal

Spurious emissions Field Strength FCC RULES PART 15, SUBPART C / LP 0002



Page 1/1 3/26/2007 4:20PM Overview / Antenna vertical

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Band Edge Measurement Mode A



BANDEDGE 802.118 CH11 Date: 20.MAB.2007 14:05:59



Mode B



BANDEDGE 802.110 CH11 Date: 28.MAB.2007 14:06:29



Minimum 6dB Bandwidth Mode A



⁶dB BANGWIDTH 802,11B CH1 Date: 28,MAR,2007 13137:06



⁶dB BANGWIDTH 802,11B CH11 Date: 28.MAR.2007 13136:07





6dB BANGWIDTH 802,11B CH6 Date: 28,MAR,2007 13:36:36



6dB BANDWIDTH 802,110 CH1 Date: 20.MAR.2007 13:31:05

Mode B



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M



6dB BANDWIDTH 802,116 CH6 Date: 28,MAR,2007 13:29:51



6dB BANGWIDTH 402,116 CH11 Date: 20.MAR.2007 13:32:16



Peak Power Spectral Density Mode A



POWER DENSITY 802.118 CH1 Date: 28.MAR.2007 13:43:44



POWER DENSITY 802.118 CH6 Date: 28.MAR.2007 13:44:22



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M





POWER DENSITY 802.11G CH1 Date: 28.MAR.2007 13:47:03

POWER DENSITY 802.11B CH11

Mode B



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6R20809-9335-C-1 FCC ID: IIOCWR-635M



POWER DENSITY 802.11G CH6 Date: 28.MAR.2007 13:46:31



POWER DENSITY 802.11G CH11 Date: 28.MAR.2007 13:45:48



Power Line Conducted Emission



EMI voltage test in the ac-mains according to FCC Part 15 Class B



Up Line: QP Limit Line Down Line: Ave Limit Line Note:

- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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- 3. For corrected test results are listed in the relevant table of AC conducted test data of this test report.